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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/596,508  | 12/12/2006  | Jan Eike Eikhoff     | GPC0103PUSA         | 2893             |
| 22045 7590 04/27/2009<br>BROOKS KUSHMAN P.C.<br>1000 TOWN CENTER<br>TWENTY-SECOND FLOOR<br>SOUTHFIELD, MI 48075 |             |                      |                     |                  |
| EXAMINER  |             |                      |                     |                  |
| WILLIS, DOUGLAS M   |             |                      |                     |                  |
| ART UNIT  |             | PAPER NUMBER         |                     |                  |
| 1624  |             |                      |                     |                  |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/596,508

**Applicant(s)**

EIKHOFF ET AL.

**Examiner**

DOUGLAS M. WILLIS

**Art Unit**

1624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-53 is/are pending in the application.
- 4a) Of the above claim(s) 29-51 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-28, 52 and 53 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-856)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Status of the Claims / Priority*

Claims 1-53 are pending in the current application. According to the *Amendments to the Claims*, filed June 15, 2006, claims 3-5, 9, 10, 17, 22, 26-30, 32, 34, 41, 43, 49, 51 and 52 were amended. This application is a 35 U.S.C. § 371 National Stage Filing of International Application No. PCT/EP2004/014371, filed December 16, 2004, which claims priority under 35 U.S.C. § 119(e) to US Provisional Application No. 60/530,612, filed December 19, 2003.

### *Restrictions*

Restriction is required under 35 U.S.C. § 121 and § 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claims 1-28 and 52, is drawn to substituted pyrazines and pharmaceutical compositions of the formula (I), where  $R^3 = \text{-aryl}$ .

Group II, claims 1-6, 9-22, 26-28 and 52, is drawn to substituted pyrazines and pharmaceutical compositions of the formula (I), where  $R^3 = \text{-heteroaryl}$ .

**NOTE:** *Claims 1 and 52 are generic to Groups I and II. If either Group I or Group II is elected, applicant must elect a provisional species, for searching purposes and prosecution on the merits only, clearly identifying a substituted pyrazine or pharmaceutical composition of the formula (I), including a detailed explanation of how all variables of the formula (I) are read upon and what claims are readable upon the species.*

Group III, claims 1-6, 9-21, 26, 28 and 52, is drawn to substituted pyrazines and pharmaceutical compositions of the formula (I), where  $R^3$ , as recited, is not as defined above.

**NOTE:** *Claims 1 and 52 are generic to Group III. If Group III is elected, applicant must elect a provisional species, **for searching purposes and prosecution on the merits only**, clearly identifying a substituted pyrazine or pharmaceutical composition of the formula (I), including a detailed explanation of how all variables of the formula (I) are read upon and what claims are readable upon the species. Also, further restriction will limit scope to Group III, once defined.*

Group IV, claim 53, is drawn to complex pharmaceutical compositions comprising substituted pyrazines of the formula (I) and an additional therapeutic compound.

**NOTE:** *Claim 53 is generic to Group IV. If Group IV is elected, applicant must elect a provisional species, **for searching purposes and prosecution on the merits only**, clearly identifying: a) a substituted pyrazine of the formula (I), including a detailed explanation of how all variables of the formula (I) are read upon and what claims are readable upon the species; and b) an additional therapeutic compound, selected from those recited in claim 53. Also, further restriction will limit scope to one of the compound groups listed as Groups I-III above.*

**NOTE:** *Claims 29-51 have been withdrawn and must be amended or canceled to comply with normal US claim practice, due to reference towards non-statutory subject matter under 35 U.S.C. § 101. Further restriction may be required once unstatory "use" claims become compliant under 35 U.S.C. § 101.*

As set forth in Rule 13.1 of the Patent Cooperation Treaty (PCT), *the international application shall relate to one invention only or to a group of inventions. Moreover, as stated in PCT Rule 13.2, the requirement of unity of invention referred to in PCT Rule 13.1 shall be fulfilled where a group of inventions is claimed in one and the same international application only when there is a technical relationship among those inventions involving one or more of the same or corresponding special technical features. The expression special technical features shall mean those technical features that define a contribution which each of the claimed inventions, considered as a whole, makes over the prior art, so linked, as to form a single general inventive concept.*

The *special technical feature* among all groups is substituted pyrazines of the formula (I).

The inventions listed as Groups I-IV do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding *special technical feature* for the following reason: WO 02/024681, cited in the international search report, teaches substituted pyrazines of the formula (I), as modulators of tyrosine kinases [p. 135, compound 93]. Consequently, the substituted pyrazines of the formula (I) do not share a *special technical feature* and do not relate to a single general inventive concept under PCT Rule 13.1.

### ***Election of Species***

This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are listed above in *Restrictions*.

The claims are deemed to correspond to the species listed above in the following manner:

Group I - claims 2-28; Group II - claims 2-6, 9-22 and 26-28; Group III - claims 2-6, 9-21, 26 and 28; and Group IV - claim 53.

The following claims are generic:

Groups I-III - claims 1 and 52; and Group IV - claim 53.

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding *special technical features* for the following reason: WO 02/024681, cited in the international search report, teaches substituted pyrazines of the formula (I), as modulators of tyrosine kinases [p. 135, compound 93].

There is an examination and search burden for these patentably distinct species due to

their mutually exclusive characteristics. The species require a different field of search (e.g., searching different classes/subclasses or electronic resources, or employing different search queries); and/or the prior art applicable to one species would not likely be applicable to another species; and/or the species are likely to raise different non-prior art issues under 35 U.S.C. § 101 and/or 35 U.S.C. § 112, first paragraph.

The election of an invention or species may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. § 103(a) of the other invention.

Applicant is required, in reply to this action, to elect a single species, *for searching purposes and prosecution on the merits only*, to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of

claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Applicant is advised that the reply to this requirement to be complete must include: **(i) an election of a species or invention to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.**

#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DOUGLAS M. WILLIS, whose telephone number is 571-270-5757. The examiner can normally be reached on Monday thru Thursday from 8:00-6:00 EST. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. James O. Wilson, can be reached on 571-272-0661. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DOUGLAS M WILLIS/  
Examiner, Art Unit 1624

/James O. Wilson/  
Supervisory Patent Examiner, AU 1624

Application/Control Number: 10/596,508  
Art Unit: 1624

Page 7